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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/677,577	10/03/2000	Iwao Masuyama	723-939	5668

27562 7590 08/27/2003

NIXON & VANDERHYE, P.C.  
1100 N. GLEBE ROAD  
8TH FLOOR  
ARLINGTON, VA 22201

EXAMINER

WHITE, CARMEN D

ART UNIT	PAPER NUMBER
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3714

DATE MAILED: 08/27/2003

14

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/677,577

Applicant(s)

MASUYAMA ET AL.

Examiner

Carmen D. White

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 June 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2-14, 23-35, 43 and 44 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-14, 23-35, 43 and 44 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2-6, 9-14, 23-27, 30-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over ***Mical*** et al (4,969,647) in view of ***Dao*** et al (5,835,077).

Regarding claims 2-3, 5 -6, 9, 11, 14, 23-25, 27, 30, 32, 35, Mical teaches a game system having a game apparatus having game program storage means and display means to display an image based on the result of processing by the processing means that comprises a housing to be held by a player; and change-state detecting means, wherein the game program storage stores game space data including image data to display a space for game play, and a display control program causes the display means to display a game space based on the game space data; a simulation program that provides simulation based on an output of the change-state detection (Figures 2 and 3; col. 2, lines 45-51). While Mical teaches the detection of change of the image {rotation/inversion} due to a change in switches contained within the housing, Mical lacks the explicit disclosure of change-state detection related to an amount of a change direction/tilt applied to the housing. In an analogous electronic game apparatus, Dao teaches a control device that has accelerometers [acceleration sensors] that could be contained within a handheld device that provide change-state detection of a change direction/tilt applied to the housing of the device (col. 1, lines 20-33; col. 4, lines 53-56;

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Fig. 1, #10). It would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate the accelerometers of Dao into the hand held video display device of Mical to provide an easier means for providing input in order to invert, rotate or tilt the image.

Regarding claims 4, 26, Mical and Dao teach all the limitations of the claims as discussed above. The accelerometers of Dao further provide impact {i.e. force} change-state detection (col. 3, lines 1-11).

Regarding claims 10, 31, Mical and Dao teach all the limitations of the claims as discussed above. While Mical and Dao teach simulated gaming environments which are known for displaying player and non-player [e.g. enemies, background, scenery, etc.] character data, the references are silent regarding explicit teachings of the movements of the non-player character as recited in the claims. The simulated gaming environments of Mical and Dao, particularly the virtual gaming environment of Dao, are capable of performing these functions. It is merely a matter of software programming for the particular game in use on the hand held device. Therefore, it would have been obvious to a person of ordinary skill in the art at the time of the invention to incorporate these features into Mical and Dao to make the game more challenging and thereby more exciting to play.

Regarding claims 12-13, 33-34, Mical and Dao teach all the limitations of the claims as discussed above. While both references teach game space data and display control programming, the references are silent concerning the explicit teaching of the game space data including space data to display a greater game space than a display

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area to be displayed by the display means. However, Mical and Dao are functionally capable of performing this function. This is merely a matter of software program.

Enhanced graphic displays are known in virtual games. It would have been obvious to a person of ordinary skill in the art at the time of the invention to employ this feature in Mical and Dao to enhance the graphic capability of the displays; thereby, creating more realistic and exciting virtual games.

Claims 7-8, 28-29, 36 and 43-44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mical et al in view of Dao et al, further in view of Saito.

Regarding claims 7-8, 28-29 and 36, Mical and Dao teach all the limitations of the claims as discussed above. The references are silent regarding the feature of a cartridge. In an analogous hand held gaming apparatus, Saito teaches this feature (Fig. 1). It would have been obvious to a person of ordinary skill in the art at the time of the invention to include a game cartridge in Mical and Dao to allow the player the convenience of playing different games; thereby providing a greater variety of games to increase player interest and retention.

Regarding claims 43-44, Mical, Dao and Saito teach all the limitations of the claims as discussed above. Dao further teaches the use of acceleration sensors (#12, #14, #16). However, the references are silent concerning the feature of acceleration sensors enclosed within the cartridge. It would have been obvious to a person of ordinary skill in the art at the time of the invention to include the acceleration sensors of Dao in a game cartridge, as taught by Saito, to provide impact/tilt capability to hand held

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devices without the existing hardware. This would make it cheaper to enhance game play on older/existing hand held devices.

***Examiner's Response to Applicant's Remarks***

The examiner has made a new art rejection, above, that addresses the features which Applicant argues for patentability. The examiner has updated the search and found the Dao reference which better addresses the change-state detection feature for sensing movement of the gaming device's ***housing***. Therefore, this office action has been made non-final and Applicant's arguments are moot in light of the new art claim rejections.

***USPTO Contact Information***

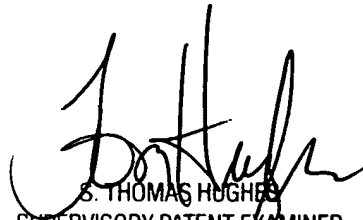
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carmen D. White whose telephone number is 703-308-5275. The examiner can normally be reached on Monday through Friday, 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tom Hughes can be reached on 703-308-1806. The fax phone numbers for the organization where this application or proceeding is assigned are 703-746-3244 (unofficial communications) and 703-305-3579 (official communications).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1078.

  
cdw

  
S. THOMAS HUGHES  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700